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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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EXAMINER

SAGER, MARK ALAN

ART UNIT	PAPER NUMBER
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3713

DATE MAILED: 12/03/2001

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.
09/437,007

Applicant(s)
Silverbrook

Examiner
Sager

Art Unit
3713



-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE three MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136 (a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on Nov 9, 1999 and Aug 17, 2001
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above, claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-17 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claims _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are objected to by the Examiner.
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. § 119

- 13) ☐ Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
- a) ☐ All b) ☐ Some* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

*See the attached detailed Office action for a list of the certified copies not received.

- 14) ☐ Acknowledgement is made of a claim for domestic priority under 35 U.S.C. § 119(e).

MARK SAGER
PRIMARY EXAMINER

Attachment(s)

- 15) ☒ Notice of References Cited (PTO-892)
- 16) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 17) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s). 3
- 18) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 19) ☐ Notice of Informal Patent Application (PTO-152)
- 20) ☐ Other: _____

Priority

1. Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

Drawings

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the 'processing and operating means' (clm 1) must be shown or the feature(s) canceled from the claim(s). No new matter should be entered. See holding regarding cited means below.

Specification

3. The incorporation of essential material in the specification by reference to a foreign application or patent, or to a publication is improper. Applicant is required to amend the disclosure to include the material incorporated by reference. The amendment must be accompanied by an affidavit or declaration executed by the applicant, or a practitioner representing the applicant, stating that the amendatory material consists of the same material incorporated by reference in the referencing application. See *In re Hawkins*, 486 F.2d 569, 179 USPQ 157 (CCPA 1973); *In re Hawkins*, 486 F.2d 579, 179 USPQ 163 (CCPA 1973); and *In re Hawkins*, 486 F.2d 577, 179 USPQ 167 (CCPA 1973). Incorporation of processor (3:27), controller chip (3:30-4:1), ink and paper cartridge (4:25-28) and printer unit (5:5-9) is noted. The incorporation of ink and paper cartridge does not ^{Specify} specific reference (4:25-28). Applicant may alternatively provide admission on record that incorporated material(s) is/(are) not essential to invention. MPEP 608.01(p).

mal

4. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d)(1) and MPEP § 608.01(o). Correction of the following is required: 'processing and operating means' (clm 1). Essentially, the instant specification discloses a DVD player module (3) which has an optional controller module (4) connected thereto where the DVD player module includes a processor (which is not shown), but does not provide proper antecedent support for a singular means performing 'processing and operating' functionality, as claimed, since disclosure appears that two separate structures perform claimed functions.

5. Claims 11 and 13 are objected to because of the following informalities: use of acronym 'MEMS' (clm 11) and 'CD-ROM' (clm 13) without spelling out --micro-electromechanical structure-- and --compact disk-read only memory-- , respectively, at first occurrence. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 11 and 17 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The phrase 'MEMS processing technique' (clm 11) is claiming steps of a process without defining the particular steps which fails to provide clear definition to public of scope of protection. The phrase

'said controller module' (clm 17) lacks antecedent basis. The dependency may possibly be typographical error.

Double Patenting

8. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321© may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

9. Claims 1-17 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of U.S. Patent No. 5566290 (Silverbrook) or, alternatively, over claims of U.S. Patent No. 5566290 (Silverbrook) in view of Matoba et al(5666141). Silverbrook ('290) claims/discloses an equivalent device (1:60-4:3, figs. 1-2) for interactive games or educational programs (3:62-65) comprising an equivalent processing and operating means for executing interactive program stored on (fig. 2, ref. 50, 63, 70), an equivalent detachable interactive program storage means (2:4-6, ref. 11, 21, 64, 78) for execution by device, an equivalent communication means including wireless communication for detachable controller (2:10-13) *whereby remote control of device is enabled at a distance to*

enable operational interaction from control devices during execution of program (2:6-18; 3:45-50, fig. 2, ref. 67, 91) and an equivalent integral printer apparatus (2:54-64; 3:45-50) including an integral internal print media supply unit using sheets of paper while being operatively associated with processing and operating means to print out images on paper relevant to interactive program including predetermined positions in said program as determined by program such as in educational certificates or game state as conventional (2:54-64; 3:45-50).

Silverbrook ('290) claims an equivalent detachable storage means (supra); however, it is not the particular DVD technology (clm 12). DVD player module for utilizing DVD programs/movies is notoriously well known for increased storage capacity due to compression techniques and for providing improved graphics/sound which are known aspects of DVD technology. Therefore, it would have been obvious to an artisan at a time prior to applicant's invention to add DVD as notoriously well known to Silverbrook's multi-media device for improved graphics/sound and increased storage capacity to provide enriched output and larger multi-media files to be stored/played. Further, alternatively regarding 'DVD' (clm 12), the equivalence of claims 13 and 14 each to claim 12 is noted. The difference between these features and that which is clearly taught by Silverbrook lies in the particular type of detachable program storage means provided. As this feature is a variation of providing detachable program storage as is notoriously well known, such would have been obvious to one of ordinary skill in the art in implementation of Silverbrook. Absent

criticality, specific detachable storage falls within the realm of choice by game designers, when implementing a particular program storage (memory device) onto Silverbrook's multimedia device. The lack of criticality of the specific recitations in the claims is evidenced by Applicant's disclosure (5:27-30) which further demonstrates these variations to be equivalent choices. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add 'DVD' as an equivalent program storage means to Silverbrook's multimedia device in order to increase portability to other storage platforms so as to increase the library of stored material such as programs/movies. Additionally, DVD storage devices are notoriously well known to provide improved graphics/sound output over other storage devices and thus, consumers may prefer programs/movies stored on this format which provides improved output, thereby increasing interest in purchase/use of device.

Additionally, Silverbrook ('290) discloses an equivalent integral printer for operatively enabling printout of images relevant to interactive program on paper (supra), but does not clearly claim or disclose the particular 'printhead and ink supply unit' and print media supply unit (clm 1), 'integral internal print media supply unit' (clm 2) printed out on 'substantially business card size' sheets of paper (clm 4), 'replaceable cartridge assembly' (clm 5), 'print media feed roller device... within the console' (clm 6), 'ink jet printhead' (clm 8), 'page width array of ink jet ejection nozzles... actuators' (clm 9), 'thermal bend actuators' (clm 10) and 'MEMS' (clm 11). Regarding particulars of claims 2, 4-6, and 8-9, ink jet printers are conventional

alternative equivalent printers to laser jet or bubble jet printers for providing print out.

Further, ink jet printers are notoriously well known to conventionally include a 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper, 'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators' for providing a hard copy print out. It would have been obvious to an artisan at a time prior to invention to add ink jet printer having 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper, 'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators' as notoriously well known and conventional as an equivalent alternative to Silverbrook's device (printer) to provide hard copy print out.

Alternatively, Matoba discloses a conventional ink jet printing method (figs. 1-51) for a ink jet printer apparatus providing an equivalent 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper, 'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators'. Essentially, Matoba's ink jet printhead is used within a replaceable cartridge which the user

determines whether to print on substrate having dimensions of legal, standard paper, envelope or 'substantially business card size' sheets of paper dependent upon application or desired output, as conventional.

Further regarding MEMS, MEMS processing technique is known alternative formation process to form printhead deemed obvious to add to Silverbrook's multi-media device or Silverbrook's multi-media device in view of Matoba for forming printhead.

Finally, magnetic coupling is known alternative method of attaching/detaching deemed obvious to add to Silverbrook's multi-media device or Silverbrook's multi-media device in view of Matoba as an alternative means for permitting selective attaching/detaching.

Claim Rejections - 35 USC § 103

10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

11. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

12. Claims 1-17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Silverbrook (5566290) or alternatively, Silverbrook ('290) in view of Matoba et al (5666141). Silverbrook ('290) discloses an equivalent device (1:60-4:3, figs. 1-2) for interactive games or educational programs (3:62-65) comprising an equivalent processing and operating means for executing interactive program stored on (fig. 2, ref. 50, 63, 70), an equivalent detachable interactive program storage means (2:4-6, ref. 11, 21, 64, 78) for execution by device, an equivalent communication means including wireless communication for detachable controller (2:10-13) *whereby remote control of device is enabled at a distance* to enable operational interaction from control devices during execution of program (2:6-18; 3:45-50, fig. 2, ref. 67, 91) and an equivalent integral printer apparatus (2:54-64; 3:45-50) including an integral internal print media supply unit using sheets of paper while being operatively associated with processing and operating means to print out images on paper relevant to interactive program including predetermined positions in said program as determined by program such as in educational certificates or game state as conventional (2:54-64; 3:45-50).

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which are known aspects of DVD technology. Therefore, it would have been obvious to an artisan at a time prior to applicant's invention to add DVD as notoriously well known to Silverbrook's multi-media device for improved graphics/sound and increased storage capacity to provide enriched output and larger multi-media files to be stored/played. Further, alternatively regarding 'DVD' (clm 12), the equivalence of claims 13 and 14 each to claim 12 is noted. The difference between these features and that which is clearly taught by Silverbrook lies in the particular type of detachable program storage means provided. As this feature is a variation of providing detachable program storage as is notoriously well known, such would have been obvious to one of ordinary skill in the art in implementation of Silverbrook. Absent criticality, specific detachable storage falls within the realm of choice by game designers, when implementing a particular program storage (memory device) onto Silverbrook's multimedia device. The lack of criticality of the specific recitations in the claims is evidenced by Applicant's disclosure (5:27-30) which further demonstrates these variations to be equivalent choices. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to add 'DVD' as an equivalent program storage means to Silverbrook's multimedia device in order to increase portability to other storage platforms so as to increase the library of stored material such as programs/movies. Additionally, DVD storage devices are notoriously well known to provide improved graphics/sound output over other storage devices

and thus, consumers may prefer programs/movies stored on this format which provides improved output, thereby increasing interest in purchase/use of device.

Additionally, Silverbrook ('290) discloses an equivalent integral printer for operatively enabling printout of images relevant to interactive program on paper (supra), but does not clearly claim or disclose the particular 'printhead and ink supply unit' and print media supply unit (clm 1), 'integral internal print media supply unit' (clm 2) printed out on 'substantially business card size' sheets of paper (clm 4), 'replaceable cartridge assembly' (clm 5), 'print media feed roller device... within the console' (clm 6), 'ink jet printhead' (clm 8), 'page width array of ink jet ejection nozzles... actuators' (clm 9), 'thermal bend actuators' (clm 10) and 'MEMS' (clm 11). Regarding particulars of claims 2, 4-6, and 8-9, ink jet printers are conventional alternative equivalent printers to laser jet or bubble jet printers for providing print out. Further, ink jet printers are notoriously well known to conventionally include a 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper, 'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators' for providing a hard copy print out. It would have been obvious to an artisan at a time prior to invention to add ink jet printer having 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper,

'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators' as notoriously well known and conventional as an equivalent alternative to Silverbrook's device (printer) to provide hard copy print out.

Alternatively, Matoba discloses a conventional ink jet printing method (figs. 1-51) for a ink jet printer apparatus providing an equivalent 'printhead and ink supply unit' and print media supply unit, 'integral internal print media supply unit' printed out on 'substantially business card size' sheets of paper, 'replaceable cartridge assembly', 'print media feed roller device... within the console', 'ink jet printhead', 'page width array of ink jet ejection nozzles... actuators' and 'thermal bend actuators'. Essentially, Matoba's ink jet printhead is used within a replaceable cartridge which the user determines whether to print on substrate having dimensions of legal, standard paper, envelope or 'substantially business card size' sheets of paper dependent upon application or desired output, as conventional.

Further regarding MEMS, MEMS processing technique is known alternative formation process to form printhead deemed obvious to add to Silverbrook's multi-media device or Silverbrook's multi-media device in view of Matoba for forming printhead.

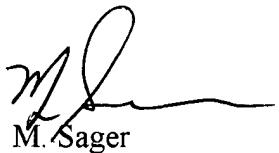
Finally, magnetic coupling is known alternative method of attaching/detaching deemed obvious to add to Silverbrook's multi-media device or Silverbrook's multi-

media device in view of Matoba as an alternative means for permitting selective attaching/detaching.

Essentially, the particularly claimed printer in combination with claimed console fails to patentably distinguish over equivalent printer in Silverbrook or Silverbrook in view of Matoba (*supra*).

Conclusion

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to M. A. Sager whose telephone number is (703) 308-0785. The examiner can normally be reached on T-F from 0700 to 1700. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Ms. Valencia Martin Wallace, can be reached on (703) 308-4119. The fax phone number for this Group is (703) 305-3580. Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the Group receptionist whose telephone number is (703) 308-1148.



M. Sager
Primary Examiner
Nov. 6, 2001